

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A mounting assembly for a wheel suspension system of a vehicle having a vehicle body, said mounting assembly comprising:

a support structure having an aperture and adapted to be mounted to the vehicle body;

a piston rod at least partially disposed within said aperture and displaceable relative to said support structure along a line of travel;

a plate mounted to said piston rod and moving relative to said support structure during said displacement of said piston rod; and

an insulator disposed between said support structure and said plate with said insulator substantially surrounding said piston rod and abutting said plate for coupling said piston rod to said support structure;

said insulator having a first portion defining a first resistance and a first maximum width for isolating said displacement of said piston rod and said plate during an application of a first force along said line of travel in a first direction which at least partially compresses said first portion, and a second portion defining a second resistance and a second maximum width with said second resistance being greater than said first resistance for controlling said displacement of said piston rod and said plate after said application of said first force and during an application of a second force along said line of travel in said first direction wherein said second force is greater than said first force such that both said first and second portions are at least partially compressed and said second width being larger than said first width to define a ledge on said second portion extending outwardly beyond said width of said first portion;

said plate having a width at least equal to said second maximum width of said second portion;

said support structure including a first cup defining a cavity and an inner surface with said first portion of said insulator at least partially disposed within said cavity for

compressing said first portion without compressing said ledge and said second portion when said first force is applied;

said first portion of said insulator disposed within said cavity defining an exterior surface complementary in configuration with said inner surface of said first cup and contiguous with said inner surface;

said support structure further including a flange extending outwardly from said first cup with said flange uniformly positioned relative to said ledge with said ledge of said second portion engaging and compressing against said flange during said application of said second force to transmit loads of said second force from said plate to said support structure.

2. (Original) The assembly as set forth in claim 1 wherein said first portion is at least partially compressed before said second portion is at least partially compressed.

3. (Original) The assembly as set forth in claim 1 wherein said first and second portions of said insulator are formed of the same material.

4. (Original) The assembly as set forth in claim 1 wherein said first and second portions of said insulator are formed of a common homogeneous material.

5. (Original) The assembly as set forth in claim 4 wherein said common homogeneous material is further defined as micro-cellular polyurethane.

6. (Cancelled).

7. (Previously Presented) The assembly as set forth in claim 1 wherein said first portion has a first height and said second portion has a second height smaller than said first height.

8. (Original) The assembly as set forth in claim 7 wherein said first height is 3 times larger than said second height.

9. (Previously Presented) The assembly as set forth in claim 1 wherein said exterior surface of said first portion has an annular configuration defining a first circumference.

10. (Original) The assembly as set forth in claim 9 wherein said second portion has an annular configuration defining a second circumference which is larger than said first circumference to define an annular ledge on said second portion extending outwardly beyond said circumference of said first portion.

11. (Original) The assembly as set forth in claim 10 wherein said first portion and said second portion having said annular ledge are formed of a common homogeneous material.

12. (Previously Presented) The assembly as set forth in claim 1 wherein said insulator is mounted to said piston rod.

13. (Original) The assembly as set forth in claim 12 wherein said piston rod includes a notch with said plate abutting said notch to mount said plate to said piston rod.

14. (Cancelled).

15. (Cancelled).

16. (Previously Presented) The assembly as set forth in claim 1 further including a jounce bumper disposed about said piston rod for translating movement of the wheel suspension system during application of said second force.

17. (Original) The assembly as set forth in claim 16 wherein said jounce bumper is mounted to said plate on an opposite side from said insulator such that loads experienced by said jounce bumper are translated through said plate, said ledge of said second portion, and into said support structure.

18. (Original) The assembly as set forth in claim 1 further including a second insulator mounted to said support structure for further coupling said piston rod to said support structure and for further isolating said displacement of said piston rod and said plate when said first force is applied along said line of travel in said first direction.

19. (Original) The assembly as set forth in claim 18 wherein said support structure includes a second cup with said second insulator mounted within said second cup.

20. - 30 (Cancelled).

31. (Previously Presented) A mounting assembly for a wheel suspension system of a vehicle having a vehicle body, said mounting assembly comprising:

- a support structure having an aperture and adapted to be mounted to the vehicle body;

- a piston rod at least partially disposed within said aperture and displaceable relative to said support structure along a line of travel;

- a plate mounted to said piston rod and moving relative to said support structure during said displacement of said piston rod;

- an insulator disposed about said piston rod between said support structure and said plate with said insulator abutting said plate for coupling said piston rod to said support structure;

- said insulator having a first portion defining a first resistance and a first maximum width for isolating said displacement of said piston rod and said plate during an application of a first force along said line of travel in a first direction which at least

partially compresses said first portion, and a second portion defining a second resistance and a second maximum width with said second resistance being greater than said first resistance for controlling said displacement of said piston rod and said plate after said application of said first force and during an application of a second force along said line of travel in said first direction wherein said second force is greater than said first force such that both said first and second portions are at least partially compressed and said second width being larger than said first width to define a ledge on said second portion extending outwardly beyond said width of said first portion; and

a jounce bumper disposed about said piston rod and mounted to said plate on an opposite side from said insulator for translating movement of the wheel suspension system during application of said second force;

said plate having a width at least equal to said maximum width of said second portion and a maximum width of said jounce bumper;

said support structure including a first cup defining a cavity and an inner surface with said first portion of said insulator at least partially disposed within said cavity and configured to be contiguous with said inner surface for compressing said first portion without compressing said ledge and said second portion when said first force is applied;

said support structure further including a flange extending outwardly from said first cup with said flange uniformly positioned relative to said ledge for positioning said ledge between said flange and said plate such that during said application of said second force, said ledge of said second portion engages and compresses against said flange to transmit loads of said second force from said plate to said support structure.

32. (Previously Presented) The assembly as set forth in claim 31 wherein said first portion is at least partially compressed before said second portion is at least partially compressed.

33. (Previously Presented) The assembly as set forth in claim 31 wherein said first and second portions of said insulator are formed of a common homogeneous material of micro-cellular polyurethane.

34. (Cancelled).

35. (Previously Presented) The assembly as set forth in claim 31 wherein said first portion has a first height and said second portion has a second height smaller than said first height.

36. (Cancelled).

37. (Previously Presented) The assembly as set forth in claim 31 wherein said piston rod includes a notch with said plate abutting said notch to mount said plate to said piston rod.

38. (Cancelled).

39. (Cancelled).

40. - 47. (Cancelled).

48. (Previously Presented) The assembly as set forth in claim 31 wherein said first and second portions of said insulator are formed of the same material.

49. (Previously Presented) The assembly as set forth in claim 35 wherein said first height is 3 times larger than said second height.

50. (Previously Presented) The assembly as set forth in claim 31 wherein said first portion has an annular configuration defining a first circumference.

51. (Previously Presented) The assembly as set forth in claim 50 wherein said second portion has an annular configuration defining a second circumference which is

larger than said first circumference to define an annular ledge on said second portion extending outwardly beyond said circumference of said first portion.

52. (Previously Presented) The assembly as set forth in claim 51 wherein said first portion and said second portion having said annular ledge are formed of a common homogeneous material.

53. (Previously Presented) The assembly as set forth in claim 31 wherein said insulator is mounted to said piston rod.

54. (Previously Presented) The assembly as set forth in claim 31 further including a second insulator mounted to said support structure for further coupling said piston rod to said support structure and for further isolating said displacement of said piston rod and said plate when said first force is applied along said line of travel in said first direction.

55. (Previously Presented) The assembly as set forth in claim 54 wherein said support structure includes a second cup with said second insulator mounted within said second cup.